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U.S. Department
of Transportation
Federal Aviation Administration

Memorandum

Subject: **INFORMATION**: Regulatory Evaluation of the Proposed Rule for Revision of Gate Requirements for High-Lift Device Controls

Date: AUG 16 1995

From: Manager, Aircraft Regulatory Analysis Branch, APO-320

Reply to Attn. of:

To: Manager, Regulations Branch, ANM-114

Attached are copies of the Regulatory Evaluation, Regulatory Flexibility Determination, and International Trade Assessment for the proposed rule. Also attached are corresponding summaries for insertion into the preamble of the rule. If you have any questions, please contact Marilyn DonCarlos at 202-267-3319.

Ward L. Keech

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Attachments

cc:ARM-1

PREAMBLE SUMMARIES FOR GATES NPRM

REGULATORY EVALUATION SUMMARY

Preliminary Regulatory Evaluation, Initial Regulatory Flexibility Determination, and Trade Impact Assessment

Proposed changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this rule: 1) would generate benefits that justify its costs and is not a "significant regulatory action" as defined in the Executive Order; 2) is not significant as defined in DOT's Policies and Procedures; (3) would not have a significant impact on a substantial number of small entities; and 4) would not constitute a barrier to international trade. These analyses, available in the docket, are summarized below.

Regulatory Evaluation Summary

U.S. manufacturers currently design high-lift device controls in compliance with the proposed rule. Industry representatives indicate that U.S. manufacturers would not have to redesign high-lift device controls on either newly certificated airplanes or derivatives of currently certificated models. The costs of the proposed rule, therefore, would be negligible. However, the FAA solicits information from all manufacturers of transport category airplanes concerning any possible design changes and associated costs that would result from the proposed amendment.

The primary benefit of the proposed rule is the clarification of gate design standards of high-lift device controls. A second benefit is the harmonization of FAR certification requirements for controls on high-lift devices with proposed JAR certification requirements. The FAA has determined that the proposed rule would be cost-beneficial.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by government regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule would have a significant economic impact, either detrimental or beneficial, on a substantial number of small entities. FAA Order 2100.14A, Regulatory Flexibility Criteria and Guidance, establishes threshold cost values and small entity size standards for complying with RFA review requirements in FAA rulemaking actions. The Order defines "small entities" in terms of size thresholds, "significant economic impact" in terms of annualized cost thresholds, and "substantial number" as a number which is not less than eleven and which is more than one-third of the small entities subject to the proposed or final rule.

Order 2100.14A specifies a size threshold for classification as a small manufacturer as 75 or fewer employees. Since none of the manufacturers affected by this proposed rule has 75 or fewer employees and any costs of the proposed rule would be negligible, the proposed rule would not have a significant economic impact on a substantial number of small manufacturers.

International Trade Impact Assessment

The rule will not constitute a barrier to international trade, including the export of American airplanes to foreign countries and the import of foreign airplanes into the United States. The proposed gate design requirements in this rule would harmonize with those of the JAA and would, in fact, lessen the restraints on trade.

U.S. Department of Transportation
Federal Aviation Administration
Office of Aviation Policy and Plans

PRELIMINARY REGULATORY EVALUATION, INITIAL REGULATORY FLEXIBILITY DETERMINATION, AND TRADE IMPACT ASSESSMENT

REVISION OF GATE REQUIREMENTS FOR HIGH-LIFT DEVICE CONTROLS PART 25

AIRCRAFT REGULATORY ANALYSIS BRANCH, APO-320
Marilyn DonCarlos
August 1995

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I. INTRODUCTION

This regulatory evaluation examines the impacts of a proposed rule to revise the certification requirements concerning gated positions on the control used by the pilot of a transport category airplane to select the position of the airplane's high-lift devices. The proposed amendment would update the current standards to take into account the multiple configurations of high-lift devices provided on current airplanes to perform landings and go-around maneuvers. The proposed amendment would also harmonize these standards with those being proposed for the European Joint Aviation Requirements (JAR).

II. BACKGROUND

Section 25.145(c) of 14 CFR part 25 (part 25) of the Federal Aviation Regulations (FAR) prescribes conditions under which it must be possible for the pilot, without using exceptional piloting skill, to prevent losing altitude while retracting the airplane's high-lift devices (e.g., wing flaps and slats). The intent of this requirement is to ensure that during a go-around from an approach to landing, the high-lift devices can be retracted at a rate that prevents altitude loss if the pilot applies maximum available power to the engines at the same time the control lever is moved to begin retracting the high-lift devices.

Prior to amendment 23 to part 25, the § 25.145(c) requirement applied to retractions of the high-lift devices from any initial position to any ending position, including a continuous retraction from the fully extended position to the fully retracted position. In amendment 23, the FAA revised this requirement to allow the use of segmented retractions if gates are provided on the control the pilot uses to select the high-lift device position. Gates are devices that require a separate and distinct motion of the control before the control can be moved through a gated position. The purpose of the gates is to prevent pilots from inadvertently moving the high-lift device control through the gated position if so doing would result in a subsequent loss of altitude. The current rule requires that the first gated control position from the landing position must correspond to the position used to establish the go-around procedure from the landing configuration.

The proposal would recodify the gate requirements by moving them from a separate and undesignated paragraph at the end of § 25.145(c) to a new § 25.145(d). It would update and clarify the requirement that the first gated control position from the landing position corresponds to the configuration used to execute a go-around from an approach to landing. The proposal would also clarify that performing a go-around maneuver beginning from any approved landing configuration should not result in a loss of altitude, regardless of the location of gated control positions. Finally, the proposal would add a statement to clarify that the "separate and distinct motion" required to move the high-lift device control through a gated position must be made at that gated position.

The proposed amendment was developed by the Aviation Rulemaking Advisory Committee (ARAC) and presented to the FAA as a recommendation for rulemaking. If adopted, the proposal would harmonize gate design standards with those being proposed by the Joint Aviation Authorities (JAA).

III. COSTS AND BENEFITS

U.S. manufacturers currently design high-lift device controls in compliance with the proposed rule. Industry representatives indicate that U.S. manufacturers would not have to redesign high-lift device controls on either newly certificated airplanes or derivatives of currently certificated models. The costs of the proposed rule, therefore, would be negligible. However, the FAA solicits information from all manufacturers of transport category airplanes concerning any possible design changes and associated costs that would result from the proposed amendment.

The primary benefit of the proposed rule is the clarification of gate design standards of high-lift device controls. A second benefit is the harmonization of FAR certification requirements for

controls on high-lift devices with proposed JAR certification requirements. The FAA has determined that the proposed rule would be cost-beneficial.

IV. REGULATORY FLEXIBILITY DETERMINATION

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by government regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule would have a significant economic impact, either detrimental or beneficial, on a substantial number of small entities. FAA Order 2100.14A, Regulatory Flexibility Criteria and Guidance, establishes threshold cost values and small entity size standards for complying with RFA review requirements in FAA rulemaking actions. The Order defines "small entities" in terms of size thresholds, "significant economic impact" in terms of annualized cost thresholds, and "substantial number" as a number which is not less than eleven and which is more than one-third of the small entities subject to the proposed or final rule.

Order 2100.14A specifies a size threshold for classification as a small manufacturer as 75 or fewer employees. Since none of the manufacturers affected by this proposed rule has 75 or fewer employees and any costs of the proposed rule would be negligible, the proposed rule would not have a significant economic impact on a substantial number of small manufacturers.

V. TRADE IMPACT ASSESSMENT

The proposed rule would not constitute a barrier to international trade, including the export of American airplanes to foreign countries and the import of foreign airplanes into the United States. The proposed gate design requirements in this rule would harmonize with those of the JAA and would, in fact, lessen the restraints on trade.